

## **Accessibility for Business Advantage**

## Executive Summary

US federal agencies have made solid progress toward the inclusion of accessibility in procurements in connection with Section 508. IBM is proud to have helped many agencies meet their obligations under Section 508 and of our fifty-year history of support to disabled people who want to use information technology. This paper describes how federal agencies can move beyond compliance and begin using accessibility to support achievement of core agency objectives. We refer to this concept as *Accessibility for Business Advantage*.

The difference between accessibility compliance and accessibility for business advantage is the choice of objectives around which to measure success. Section 508 guidelines focus on the acquisition of accessible hardware and software within the IT infrastructure of federal agencies. This leads to a focus on procurement of capabilities that meet the Access Board's standards, but not necessarily the exploitation of those capabilities. With a solid base of compliant infrastructure established, we believe that agencies can begin to sharpen their focus on gaining leverage from the investments Section 508 has driven. IBM believes that governments can lead the private sector by several years in this effort and can concentrate their focus around two areas: human capital management, including employee recruitment, development, retention and productivity enhancement, and support for e-government applications that facilitate relationship development and service delivery with key constituents.

## Application of Accessibility to Human Capital Management

The application of accessibility to human capital management begins even before employment since it flows from an agency's recruiting and staffing strategy. Federal agencies have seen their ability to attract new employees rise and fall with the business cycle. When the private sector is "hot" and growing rapidly, prospective employees are attracted by the generally higher pay and perceived benefits of private sector employment. When the private sector cools off, new entrants to the workforce and people laid off by business seek the stability of government employment. In extreme cases, sometimes only for specific skill groups, government can even lose employees to equivalent private sector jobs at a rate faster than they can be replaced through new hiring. Disabled Americans are employed at measurably lower levels than their able counterparts.<sup>1</sup> The leadership position in accessible infrastructure that federal agencies have created can help the government meet its staffing objectives by becoming the employer of choice for these underemployed people.

### ***Increased Efficiency and Effectiveness***

The expense of recruiting and hiring, combined with the disruption of staffing shortages, turnover and training, can seriously impact agency efficiency and effectiveness. The conversion of accessibility investments into tools that facilitate hiring of disabled employees could be an agency-wide initiative, or one that is focused on specifically chosen skills. Likely focus areas include the employment of people who are blind or mobility impaired in customer service positions and call centers or people who are deaf for many types of analytical and clerical work. Many difficult to fill positions in information technology are within the reach of people with a wide range of disabilities, too. The minimal incremental cost of supporting disabled people in appropriately chosen positions should be more than offset by savings in recruiting costs and the reduced impact of skill shortages and turnover on an agency's mission effectiveness. When used in conjunction with other programs such as mentoring, flexible work schedules and telecommuting, the impact can be amplified for the benefit of agencies and employees.

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<sup>1</sup> <http://www.census.gov/hhes/www/disable/sipp/disab97/ds0714.html>

### ***Increased Productivity***

Moving beyond recruiting and hiring, accessibility has potential to enhance productivity throughout an employee's career—and not just for the disabled. Certainly, disabled employees who require assistive technology to perform their primary job functions will require similar support for employee development and training. In many areas, these investments may support non-disabled people as well. For example, while closed captioning is essential for deaf users of video material, many hearing people find it helpful and convenient to use captions from time to time. This is especially true for multi-lingual employees who comprise an increasing part of the federal workforce and whose comprehension rises significantly with the availability of captioning that repeats spoken material.<sup>2</sup> While good design practices that support screen readers are of obvious value to blind users, they may also assist people with hidden disabilities like color blindness or people with no visual impairment whatsoever who need to access information using nontraditional Web access devices such as cell phones. As our understanding of accessible design improves and its deployment spreads, the cost of these enhancements is declining and the opportunity to realize value at the agency level will increase.

### ***A Factor to Consider in Retention Strategy***

Many agencies are facing the prospect of significant numbers of employees retiring in the next five years. This could cause critical skill shortages along with a loss of significant amounts of institutional knowledge. Where this occurs, agencies will be forced to either step up recruiting efforts to match attrition levels, provide incentives for employee retention or outsource work to contractors. The role of accessibility will be as important in support of retention programs as in hiring. Since a retained workforce will generally be an older workforce and since older people are more likely to suffer from lower vision, hearing loss and mobility challenges, these workers may have a disproportionately higher need for the support of assistive technology. Creating a work environment that makes it comfortable for aging workers to remain on the job with sustained satisfaction and productivity should be one element in a retention strategy. For these long-term government employees, the support needed to maintain access will generally be simpler, less costly and can be applied more progressively than for new employees whose disabilities exist at the time of employment. The commitment of senior agency management to maintain a comfortable work environment for older employees may be a strong demonstration that these employees are valued and may slow attrition allowing a longer, more manageable time for institutional knowledge to transfer from the current workforce to those coming up through the ranks.

## **Accessibility - The Relationship Dimension**

In the accessibility for business advantage relationship dimension we see opportunities to invest in accessibility as a tool to support both the efficiency and effectiveness of service delivery to constituents. The increasing reliance of business and government on online tools for service delivery is well documented and well justified. Consumer-focused businesses today are virtually all e-businesses and agencies that have a mission to provide direct service to constituents are virtually all e-agencies. The advantages of lower cost to the organization and increased flexibility to the consumer will continue to drive organizations to place more services online. There is a fundamental difference between an e-business and an e-government as far as accessibility investments are concerned. The disabled population achieves only 75% of the earnings per capita of their able counterparts.<sup>3</sup> Lower levels of disposable income make the disabled community a relatively less attractive market segment for businesses and a more essential constituent group for governments to serve than their numbers would imply. The lower economic

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<sup>2</sup> <http://www.cal.org/ncle/digests/PARKS.HTM> - Parks, Carolyn. 1994. *Closed Captioned TV: A Resource for ESL Literacy Education*. ERIC Digest. Washington, DC: National Center for ESL Literacy Education. (EDO-LE-94-02)

<sup>3</sup> <http://www.census.gov/hhes/www/disable/sipp/disab97/ds97t4.html> and <http://www.census.gov/hhes/www/disable/sipp/pubs/p70-73.pdf>

incentives to business will slow their focus on accessibility in customer service delivery while government agencies have a much stronger incentive to invest. Governments have the incentive and opportunity to lead private sector organizations by several years in the effective deployment of accessibility to support constituent service delivery.

### ***Flexibility and Constituent Satisfaction***

Many of the incentives for e-government investment are tied to the ability to offload agency staff of repetitive tasks such as answering the most commonly asked constituent questions and to relieve operational costs for items such as call centers, printing and postage. The improved flexibility offered by online tools is likely to improve an agency's ability to deliver mandated services to the full range of eligible constituents as well. Certainly, those constituents who receive service online have the opportunity to do so with more flexibility and probably more satisfaction by accessing government at their leisure rather than at predefined office hours. The combination of quantifiable benefits such as reduced operating cost and staff effectiveness with subjective benefits including constituent satisfaction and the improved reach of service delivery will continue to shape and drive e-government investments. The relatively higher proportion of disabled constituents should skew these investments toward their needs. If applied properly, this focus will advantage both the agency and the disabled constituents.

### ***Strategic Planning and Business Transformation***

Federal agencies wishing to achieve additional advantages from investments in accessibility need to look beyond the Section 508 guidelines. Certainly, Section 508 is the starting point and represents a standard for infrastructure accessibility, but the realization of advantage requires techniques more commonly associated with strategic planning and business transformation. That is where IBM believes agencies need to start to explore this topic. As mentioned above, the management of accessibility in recruiting, hiring and retention needs to be driven from the agency's staffing plan. To realize their full value, accessibility investments need to be complemented by focus in areas such as the training of HR staff and outside contractors who conduct recruiting and PR plans to reach likely candidates and those who support them in their job searches. IBM's Strategy and Change Consulting skills can be applied here. So can the skills of our Dynamic Workplaces practice which looks at many of the Human Capital issues and the IT support tools for employees in general or even for specific professions.<sup>4</sup> Revamping agency service delivery processes to better serve disabled constituents requires linkage to the demographics and usage patterns of specific agency constituents. For example, the constituents of the National Aeronautics and Space Administration (NASA) and the Social Security Administration are quite different therefore the online interaction with those agencies takes different forms and the exploitation of accessibility for constituent service would be best served by different techniques. The skills of IBM and our Business Partners in areas like Customer (or Constituent) Relationship Management (CRM), knowledge management and the design and deployment of effective portals come into play to assess and respond to those types of differences on an agency-by-agency basis. Accessibility for business advantage does not come with a one-size-fits-all strategy guide.

Finally, the deployment of effective strategies, their linkage with legacy processes and their evolution will have to be monitored and enhanced to maximize benefits over time. Whether agencies elect to perform these tasks in-house or through contractors, this process will likely draw on a range of capabilities from systems integration to outsourcing to Web delivered services on demand. The inclusion of new technologies to support accessibility such as real-time captioning through speech recognition, screen reader support for complex data types such as graphics and maps and the migration of "accessibility" to the mainstream through pervasive

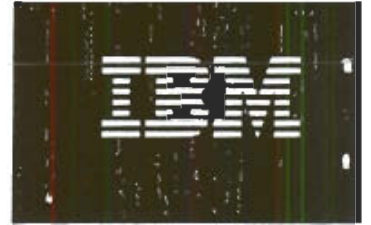
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<sup>4</sup> For more information visit <http://www-1.ibm.com/services/fullbusiness.html>.

devices will bring new challenges, new benefits and the opportunity for agencies to realize new value. IBM's commitment to technology and services around accessibility has us positioned to advance these initiatives and support agencies that wish to exploit them.

## **Additional Information**

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IBM Research

Produced in the USA

01-03

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